

AMENDMENTS TO THE CLAIMS:

1. (Currently amended) In a centripetally-motivated fluid micromanipulation apparatus, a microsystem platform comprising
- a) a rotatable platform, comprising a substrate having a first flat, planar surface and a second flat, planar surface opposite thereto, each surface comprising a center about which the platform is rotated, wherein the first surface comprises in combination
 - b) an entry port comprising a depression in the first surface having a volumetric capacity of about 1 to about 150 μ L, that is fluidly connected with
 - ~~c) a first microchannel which defines an internal dimension of about 0.02mm to about 1mm, and wherein the microchannel extends radially from the center of the platform and defines a first end proximally arrayed towards the center of the platform and a second end distally arrayed from the center of the platform, wherein the first microchannel is fluidly connected with~~
 - d) a first fluid chamber having a volumetric capacity of about 1 to about 150 μ L a depth from the first surface of the platform equal to or greater than the first microchannel and positioned radially more distant from the center of the platform than the entry port,
- wherein rotation of the platform at a first rotational speed motivates displacement of the fluid in the entry port through the first microchannel and into the first fluid chamber; and wherein the platform further comprises
- c[e)] a second fluid chamber containing a volume of a displacement fluid, the second fluid chamber being fluidly connected with
 - d[f)] a ~~second~~ first microchannel, wherein the ~~second~~ first microchannel extends radially from the center of the platform and defines a first end proximally arrayed towards the center of the platform and a second end distally arrayed from the center of the platform, wherein the ~~second~~ first microchannel is fluidly connected with the second fluid chamber at the first end of the microchannel and wherein the ~~second~~ first microchannel is fluidly connected with the first fluid chamber at the

~~second end of the microchannel, wherein rotation of the platform at the first rotation speed does not motivate flow of the displacement fluid through the second microchannel; and wherein the platform further comprises~~

e[g]) a third fluid chamber that is fluidly connected with

f[h]) a ~~third~~ second microchannel, wherein the ~~third~~ second microchannel extends radially from the center of the platform and defines a first end proximally arrayed towards the center of the platform and a second end distally arrayed from the center of the platform, wherein the ~~third~~ second microchannel is fluidly connected with the ~~third~~ second fluid chamber at the first end of the microchannel and wherein the ~~third~~ second microchannel is fluidly connected with the ~~second~~ first fluid chamber at the second end of the microchannel, ~~wherein rotation of the platform at the first rotation speed does not motivate flow of the displacement fluid through the third microchannel;~~

wherein rotation of the platform at a ~~second~~ rotational speed motivates flow of the displacement fluid from the second fluid chamber, through the first ~~second~~ microchannel and into the first fluid chamber, wherein flow of the displacement fluid into the first fluid chamber forces the fluid in the first fluid chamber through the second ~~third~~ microchannel and into the third fluid chamber; and wherein ~~each~~ of the microchannels and the fluid chambers also comprise air displacement channels whereby air displaced by fluid movement is vented to the first surface of the platform.

2. (Currently amended) A method for moving a fluid in a microsystem platform according to Claim 1, the method comprising the steps of

- a) applying an amount of a fluid sample comprising a volume of about 1 to about 100 μ L to the first fluid chamber ~~entry port~~ of the rotatable microsystem platform;
- b) rotating the platform at a first rotation speed for a time sufficient to ~~displace the fluid in the entry port into the first fluid chamber; and~~
- ~~c) rotating the platform at a second rotation speed that is greater than the first rotational speed that motivate[s] the displacement fluid through the displacement fluid from the second fluid chamber, through the second microchannel and into~~

the first fluid chamber, wherein flow of the displacement fluid into the first fluid chamber forces the fluid in the first fluid chamber through the second ~~third~~ microchannel and into the third fluid chamber.

3-6. (Cancelled)

7. (New) The method of claim 2, wherein the fluid sample is a biological sample.